

SSU ACTIVATION

- PCS
1. VERIFY DCSU 4B(2B) RBI 1 VOLTAGE AND CURRENT
P6: EPS: SSU 4B(2B)
SSU 4B(2B)
'DCSU 4B(2B)'

√RBI 1 RBI I < 8 A
√RBI 1 RBI V: 132 --- 148 V

2. VERIFY COMMUNICATION WITH SSU 4B(2B)
√Integ Counter - incrementing

3. VERIFY SSU 4B(2B) LFDP STATUS
√LFDP1 - Off
√LFDP2 - Off
√LFDP3 - Off

NOTE

The SSU 4B(2B) LFDP defaults to the off-state upon SSU activation.

4. VERIFY SSU 4B(2B) SENSOR AND SETPOINT OPERATION
√PCVE1 Bus Voltage: 11 --- 29 V
√PCVE2 Bus Voltage: 11 --- 29 V
√PCVE3 Bus Voltage: 11 --- 29 V
√Shunt Circuit1 Current < 3 A
√Shunt Circuit2 Current < 3 A
√Right Sidewall Temp: -55 --- 121° C
√Left Sidewall Temp: -55 --- 121° C
√Output Voltage: 132 --- 148 V
√Output Current < 5 A
√Bus Voltage Setpoint: 150 --- 167 V
√Error Bus Voltage: 11 --- 29 V
√Power Supply Output Status - Nominal
√Pwr On Reset - Reset
√DC Cntrl Pwr Input Status - Off

sel 'PVCE'

√PVCE1 Bus Voltage Setpt Cmd Stat = TBD V
√PVCE2 Bus Voltage Setpt Cmd Stat = TBD V
√PVCE3 Bus Voltage Setpt Cmd Stat = TBD V

5. CONFIGURE SSU 4B(2B) TO FULL SHUNT MODE

NOTE

All three PVCEs must be commanded Off to configure the SSU to full shunt mode. The SSU firmware will automatically clamp the SSU output once two of the three PVCEs are off. This step must be completed prior to deploying the Solar Array to avoid transients on the DCSU primary power bus.

sel 'PVCE'

sel PVCE [X] [X] =

cmd SSU 4B(2B) PVCE [X] Off
√PVCE [X] Stat - Off

Repeat

√PVCE 1 Bus Voltage < 1 V

√PVCE 2 Bus Voltage < 1 V

√PVCE 2 Bus Voltage < 1 V

√Error Bus Voltage < 1 V

√Shunt Circuit1 Current < 3.0 A

√Shunt Circuit2 Current < 3.0 A